Amendment to Claims

This listing of Claims will replace all prior versions and listings of claims in this Application.

Listing of Claims

Claim 1 (Currently Amended): A method for clarifying a subject's collected ECG waveform for analysis by first effectively removing a recognized, embedded influence over certain characteristics of that waveform which exists by virtue of the physiologic presence, in the subject's heart, of a particular ECG confounder, said method comprising

creating a reference ECG waveform model which possesses the characteristics of an ECG waveform that is influenced by the presence of the particular confounder,

using that model, linking it relationally to an appropriate ECG purge algorithm which, in cooperation with the model, can be applied to such a subject's collected ECG waveform to remove the influence of the confounder, and

applying that linked model and purge algorithm to such a collected ECG waveform, thus to produce a purge-processed ECG waveform that lacks the influence of the selected confounder,

wherein said creating involves quantitative modeling of ST abnormalities due to the presence of Left Bundle Branch Block (LBBB) within the traditional 12-lead resting ECG, and said modeling includes (a) identifying ECG leads for which LBBB induced ST deviation (modST) will be estimated, (b) for each such lead being considered, measuring the largest positive and the largest negative voltage deflections (PosMax, NegMax), (c) calculating the actual ST deviation (STdev) at the J + 20ms point, (d) calculating the estimated LBBB induced deviation: (estST): estST = -(NegMax-STdev) + (PosMas - STdev)/10, and (e) establishing, lead-by-lead, the direct current (DC) offset constant value component for use in a normalizing equation.

Claims 2-9 (Cancelled).

Claim 10 (New): A method for clarifying a subject's collected ECG waveform for analysis by first effectively removing a recognized, embedded influence over certain characteristics of that waveform which exists by virtue of the physiologic presence, in the subject's heart, of a particular ECG confounder, said method comprising

creating a reference ECG waveform model which possesses the characteristics of an ECG waveform that is influenced by the presence of the particular confounder,

using that model, linking it relationally to an appropriate ECG purge algorithm which, in cooperation with the model, can be applied to such a subject's collected ECG waveform to remove the influence of the confounder, and

applying that linked model and purge algorithm to such a collected ECG waveform, thus to produce a purge-processed ECG waveform that lacks the influence of the selected confounder,

wherein said creating relates to quantitative modeling of ST abnormalities due to the presence of Right Bundle Branch Block (RBBB) within the traditional 12-lead resting ECG, and said modeling includes (a) identifying ECG leads for which RBBB induced ST deviation (modST) will be estimated, (b) for each such lead being considered, measuring the positive and negative magnitudes of the voltage deflection at the point 2/3 after the QRS onset (TermMax, TermMin), (c) calculating the actual ST deviation (STdev) at the J + 20ms point, (d) calculating the estimated RBBB induced deviation (estST): estST = -(TermMin - STdev) + (TermMax - STdev)/10, and (e) establishing, lead-by-lead, the direct current (DC) offset constant value component for use in a normalizing equation.

Claim 11 (New):   A method for clarifying a subject's collected ECG waveform for analysis by first effectively removing a recognized, embedded influence over certain characteristics of that waveform which exists by virtue of the physiologic presence, in the subject's heart, of a particular ECG confounder, said method comprising

creating a reference ECG waveform model which possesses the characteristics of an ECG waveform that is influenced by the presence of the particular confounder,

using that model, linking it relationally to an appropriate ECG purge algorithm which, in cooperation with the model, can be applied to such a subject's collected ECG waveform to remove the influence of the confounder, and

applying that linked model and purge algorithm to such a collected ECG waveform, thus to produce a purge-processed ECG waveform that lacks the influence of the selected confounder,

wherein said creating involves quantitative modeling of ST abnormalities due to the presence of Left Ventricular Hypertrophy within the traditional 12-lead resting ECG, and said modeling includes (a) identifying ECG leads for which LVH induced ST deviation (modST) will be estimated, (b) for the frontal leads (I, III, III, -aVR, aVL, aVF), measuring the largest positive and largest negative voltage deflections (PosMax, NegMax), (c) calculating the actual ST deviation (STdev) at the J + 20ms point, (d) calculating the estimated frontal lead LVH induced deviation (estST): estST =
-(NegMax-STdev) + (PosMax - STdev)/40, (e) establishing the estimated precordial lead LVH induced deviation, and (f) establishing, lead-by-lead, the direct current (DC) offset constant value component for use in a normalizing equation.

Claim 12 (New): A method for clarifying a subject's collected ECG waveform for analysis by first effectively removing a recognized, embedded influence over certain characteristics of that waveform which exists by virtue of the physiologic presence, in the subject's heart, of a particular ECG confounder, said method comprising

creating a reference ECG waveform model which possesses the characteristics of an ECG waveform that is influenced by the presence of the particular confounder,

using that model, linking it relationally to an appropriate ECG purge algorithm which, in cooperation with the model, can be applied to such a subject's collected ECG waveform to remove the influence of the confounder, and

applying that linked model and purge algorithm to such a collected ECG waveform, thus to produce a purge-processed ECG waveform that lacks the influence of the selected confounder,

wherein said creating relates to quantitative modeling of ST abnormalities due to the presence of Left Ventricular Hypertrophy with STT abnormalities within a traditional 12-lead resting ECG, and said modeling includes (a) for each such lead being considered, measuring the largest positive and largest negative voltage deflections (PosMax, NegMax), (b) calculating the actual ST deviation (STdev) at the J + 20ms point, (c) for frontal leads, and for selected precordial leads calculating the estimated LVH/STT induced deviation (estST): estST = -(NegMax-STdev) + (PosMax-STdev)/20, (d) for the remaining precodial leads, calculating the estimated LVH/STT induced deviation (estST): estST = -(NegMax-STdev) + (PosMax - STdev)/40, and (e) establishing, lead-by-lead, the direct current (DC) offset constant value component for use in a normalizing equation.